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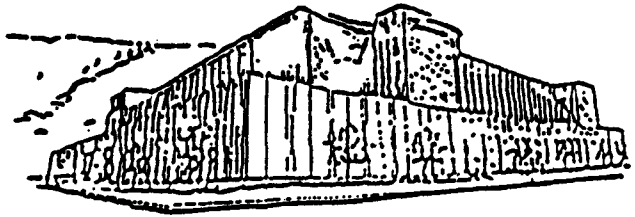
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The Influence of Print Media Advertisements on Women

by

Heather Paluso

B.A. University of San Francisco, 1996

presented in partial fulfillment of the requirements

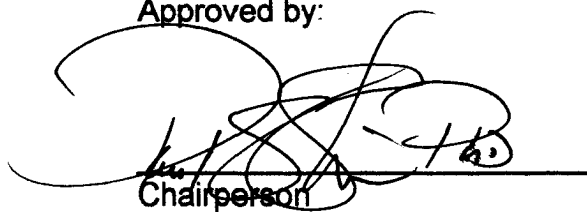
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The Influence of Print Media Advertisements on Women (79 pp.)

Director: Paul Silverman, Ph.D. 

Media advertisements frequently present idealized images of women in order to sell products. These media images are prevalent in our society and present unrealistic images of the ideal female body. Since social comparison is the prevalent method by which we learn about ourselves and the world, examining the effects of social comparison as manipulated by advertisers is important. Placed against a backdrop of society's reverence for beauty that is a largely unattainable standard, advertisers utilize the natural tendency toward social comparison as a way to promote their products. This study examined how beauty advertisements in women's magazines affected women's mood. The contribution of body dissatisfaction was also considered. Three types of advertisements were shown to participants: an unaltered version, one containing the female model, and one containing the product. A 2 X 2 X 3 Repeated Measures Mixed Model Analysis of Variance (body dissatisfaction X time X condition) was used to determine significant effects on mood. Negative mood changed significantly over time in the product + text condition. This finding is discussed, along with implications for future research.

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## Chapter One

### Introduction

Media advertisements frequently present idealized images of women in order to sell products. Research shows that exposure to these images lowers women's self-concept, body satisfaction (Cash, Cash, & Butters, 1983), and mood (Heinberg & Thompson, 1995, Wolf, 1991). These media images are prevalent in our society and present unrealistic images of the ideal female body. Failing to live up to this ideal results in lowered mood and lowered self concept and body satisfaction. Below, literature is reviewed and a study is proposed to examine the effects of media on these dimensions with a specific focus on factors that may predict negative effects of viewing unrealistic media images.

The nature of self-concept was once considered to comprise a single domain. However, current hypotheses present it as a multidimensional model that is composed of many diverse elements. Social comparison theory is an integral part of current self-concept research. Social comparison theory is also important to the present study, as it examines how a person's social comparisons affect her body dissatisfaction, gender role stereotypes, and mood. The present study will examine how being exposed to media sources that present unrealistic depictions of women affect these factors in a sample of college women. Specifically, which factors predict susceptibility of women to be affected by these media images, or serve as protective factors that buffer the effects of the images.

Fredrickson and Roberts (1997) discuss women's experience in society in terms of objectification theory. Objectification theory examines how women's

bodies are regarded as social instruments by society and the effect this creates. The authors describe objectification as being regarded as simply a body, independent from the individual woman. When regarded as a collection of parts, rather than as an entire person, it is easier to place value on the physical characteristics of the person. The authors contend that images of women in the media are highly sexualized and present women merely as physical bodies. They refer to this as an example of how the objectification of women has permeated our culture. As women accept their own objectification, they begin to associate their physical presence with their self-concept. To the degree a woman feels she falls short of the physical standard, her self-concept, mood, and body satisfaction are lowered.

### Social Comparison Theory

The theory of the social comparison process originated with Festinger (1954). He stated that it is human nature to evaluate our own opinions and abilities, and that this behavior was necessary for optimal functioning. Although it is best to evaluate ourselves against an objective standard, one is seldom available. This causes us to use others as an evaluative yardstick. Festinger identified two motives for social comparison: self-evaluation and self-improvement. A study by Helgeson and Mickelson (1995) examined ways in which college students compared themselves to others. Self-evaluation was found to be the most likely motive for social comparison, followed by self-improvement. Wills (1981) proposed a third motive. He states that when

faced with a threat, people may attempt to enhance their self-esteem by comparing themselves to others less fortunate than themselves.

The sociometer hypothesis of self-concept suggests that a person's self-concept system monitors social interactions and alerts the person to the possibility of social exclusion (Leary, Terday, Tambor, & Downs, 1995). Human beings are social creatures, and the sociometer hypothesis stems from the observation that they seem to be motivated to seek inclusion in social groups. They therefore would want to avoid social exclusion. There could be an evolutionary basis for this behavior. During earlier times in human history, a solitary human being would be less likely to survive and have the opportunity to contribute his or her genes to another generation. The authors suggest that our current sociometer behaviors could be rooted in this primitive need to belong to a group.

Wood (1996) has offered a definition of social comparison. She defined it as "the process of thinking about information about one or more other people in relation to the self" (p.521). Wood identified the three main processes as acquiring social information, thinking about it, and finally, reacting to it. The present perspective on social comparison recognizes that there are multiple processes that contribute to comparison, with the essential feature being the act of relating self to others.

Wood also specified what is included in a social comparison. Her model for social comparison encompasses all social information. Actual contact with the

object of comparison is not necessary. A fictional character can provide as much opportunity for comparison as an actual human being.

This raises the question of exactly who can function as a target for social comparison. Cash, et.al. (1983) hypothesized that social comparison targets are those people whom the person feels are peers. As noted above, the social comparison target does not need to be a real person. Therefore, it would seem that a fictional character or celebrity that a person believes to be a peer might elicit a social comparison response. Research by Heinberg & Thompson (1992) supports this hypothesis. These researchers were interested in which specific comparison targets men and women utilized in social comparison. They asked them to rate the importance of six different groups: family, friends, classmates, students, celebrities, United States citizens. On the dimension of appearance, both men and women chose a similar order of comparison: friends>classmates=students=celebrities>United States citizens=family. The participants rated celebrities as equivalent to classmates and other students, and chose friends as the only group used more as comparison. U.S. citizens and family were placed last. This suggests that social comparison targets are not always reasonable choices. For instance, it would seem likely that U. S. citizens would be perceived to share more in common than celebrities from television or movies. U.S. citizens represent a diverse range of backgrounds and appearances, while celebrities belong to a very specific subculture. They are financially comfortable, have the means to maintain and alter their appearance to



be more attractive, and are perceived to lead a glamorous lifestyle that the average person does not.

Another topic of debate is whether social comparison is a deliberate action. Many studies in the field have considered it to be intentional. But Wood points out that people who encounter social information may not seem to use it for comparison, but do automatically compare themselves. Research by Gilbert, Giesler, & Morris (1995) supports this view. He found evidence that people make comparisons fairly spontaneously, even when the comparison is inappropriate. Goethals (1986b) contends that social comparison is an unconscious process. People may make comparisons to friends, coworkers, even television characters without being aware of it. The objects of social comparison are usually similar to the person making the comparison on several dimensions, such as age and gender (Wood, 1989).

#### Societal Standards Facilitate Social Comparison

Another question related to this issue is who sets the norms for society? In the United States the ideal woman is tall and thin, almost anorexic. Garner, Garfinkel, Schwartz, & Thompson (1980) studied archival data of height and weight measurements of Miss America pageant winners from 1960 to 1978. They also gathered the bust, waist, and hip measurements of 240 "Playboy" centerfolds over a span of 20 years. The researchers found that the weights had decreased significantly for the Miss America pageant winners. The "Playboy" data suggest that body type has changed from curvaceous to a less curvy, slim figure. A study by Silverstein, Perdue, Peterson, & Kelly (1986) examined 221

characters from 40 of the most popular television shows. They found that 69.1% of females were rated as thin, as compared to only 17.5% of the males. This suggests that there are different standards of beauty for men and women on television. Women are expected to be thin, while it may be more acceptable for a man to be less than ideal.

Since celebrities have been identified as a relevant comparison group, the content of television, movies, magazines, and other forms of media should have an effect on mood, body dissatisfaction, and self-concept. The images we see in various forms of media are often unrealistic and not representative of the average American. Yet, they are common targets of social comparison.

### Self-Concept and Gender

In addition to social comparison based on unrealistic body images, gender is another factor that may influence self-concept. Women's self evaluation tends to be lower than men's and physical appearance appears to be an important evaluative dimension. Josephs, Markus, & Taforodi (1992) hypothesized that "self-esteem is related to successfully measuring up to culturally mandated, gender-appropriate norms." This suggests that an individual's level of self-esteem may reflect, in part, how similar he or she is to the current standards set by society.

Since gender seems to be a significant factor that influences self-concept, it is important to consider gender differences in self-concept from childhood to adolescence and beyond. Knowledge of how self-concept develops differently in boys and girls may lead to an increased understanding of adult self-concept as

well as to interventions in childhood to encourage development of a positive self-concept.

Puberty has been recognized as a critical time in the development of negative body image in girls. Studies have demonstrated that as a girl's body changes during puberty, it becomes public domain. It is more often evaluated by others by looking at and commenting on the changing body (Dion, et al., 1990; Martin, 1996). Adolescence and young adulthood are times of gender identity and sex role exploration, which may increase the effects of the societal pressure for thinness (Tiggemann & Pickering, 1996). Goodman (1996) proposes that positive body image in women has progressively declined in younger women due to the commercial exploitation of women's bodies found in various types of media.

A longitudinal study followed participants from childhood to late adolescence and examined the developmental changes in self-esteem (Block & Robins, 1993). Self-esteem in males tended to increase over time, while the self-esteem of females decreased. A study by Blyth, Simmons, & Carton-Ford (1983) supported this. They found that from sixth to tenth grade, the global self-esteem of boys increased, while that of girls decreased. In addition, the longitudinal study by Block and Robins found that at adolescence, males and females with high self-esteem had very different characteristics. However, by early adulthood, the characteristics associated with high self-esteem were more similar for both sexes. This suggests that males and females develop self-esteem in different ways.

Jackson, Hodge, & Ingram (1994) examined the differences in self-concept in male and female college students. They found statistically significant gender differences on every dimension of self-concept they studied except for two (same-sex relationships and parent relationships). Males had more positive self-concepts in the areas of math ability, sports/physical ability, physical appearance, and emotional stability. Females had more positive self-concepts in verbal ability, academic ability, other-sex relationships, religion, and honesty/reliability. However, the overall self evaluations by males were more favorable than for females. The researchers also found college students as a whole had a more positive overall rating than did high school students, suggesting that self-concept improves (and possibly stabilizes) with age and maturity. Males in both high school and college, however, had a higher overall self-evaluation than females, which raises the question of how males' self-concept is different than females'. Perhaps the hypothesized self-concept domains influence self-concept differently in males than in females. Although the self-concept of both sexes improves with age, as noted by the results of the college population, males continue to rate themselves more positively than women.

The dimension that best predicted overall self evaluation for both genders, in both high school and college, was physical appearance. Females rated themselves lower on the physical appearance dimension, which contributed to their lower overall self evaluation. It appears that for females, their own perception of their appearance had a significant effect on their overall

self-concept. The unrealistic norms society sets for the ideal female could have a negative impact on the self-concept of females who don't feel they measure up to these standards. Since physical appearance is the most influential domain in female self-concept, the constant exposure to unrealistic standards, especially those presented in various media forms, could negatively influence a female's self-concept.

Gender differences become more apparent on multidimensional measures of self-concept. It has been suggested that different domains influence self-concept for men and women. Such domains may include mathematics ability, verbal ability, sports, physical appearance, same-sex relationships, and other-sex relationships (Jackson, et al., 1994). An extension of the domain model is that men and women have a different basis for self-evaluation, and that it relates to their socialization emphases (Block, 1984; Markus & Oyserman, 1988). Women are socialized to develop a self-concept in which relationships with others and connectedness is the priority. For men, self-concept is related to their separation from others and their independence.

Social comparison plays an important role in the development of self-concept. In order to evaluate oneself, others in one's environment are used as a reference. Wood (1996) states that any social information, even fictional in nature, can be used as a target of social comparison. Modern society is a technological one--we encounter real and fictional information in many types of media each day. Two common media are television and magazines.

### Effects of Advertising Media on Mood, Body Satisfaction, and Self-Concept

A study by Downs & Harrison (1985) examined the attractiveness messages observed in commercials. They found that 1 in every 3.8 commercials contained an attractiveness message. It is interesting to note that women were more frequently associated with these messages than men. The role of males in these commercials was to provide voice-overs, which Bretl and Cantor (1988) refer to as the "voice of authority." As many as 90% of the voice-overs in the commercials studied by them were provided by males.

Cash, et.al. (1983) studied the effect of print media on women. They showed 51 women pictures from magazine advertisements and articles. These pictures were female and had been pre-rated for attractiveness. There were three exposure conditions: physically attractive/not labeled as models, physically attractive/labeled as professional models, and not physically attractive/not labeled as models. The women viewed the photos, then rated their own overall physical attractiveness and body satisfaction. The researchers found that the women exposed to the non-model physically attractive photos rated their own level of attractiveness lower than did those women who were exposed to the physically attractive models and the non-physically attractive non-models. The researchers hypothesized from these results that the women engaged in social comparison with the non-model-labeled attractive photos, because they considered them to be peers. The model-labeled women would not be considered similar to them, and would therefore not elicit the social comparison response.

Heinberg and Thompson (1995) studied the effect of appearance-related television commercials. A sample of female undergraduates was presented with one of two sets of commercials: Appearance-related or Non-Appearance related. The Appearance-related commercials were made up of women who represented the ideals of attractiveness and thinness. In the Non-Appearance related commercials the women actors were of average, or above average, weight and did not focus on weight or appearance as an issue. Some commercials in this group did not use actors, and instead consisted of voice-overs. Participants were instructed to view the commercials as they would if they were at home. The researchers found that the participants viewing the Appearance related commercials increased in depression from pre to post test. The participants who viewed the Non-Appearance related commercials decreased in depression. The researchers interpreted these findings to mean that media-presented images of attractiveness negatively affect mood and body satisfaction. The researchers noted that they limited the pool of participants to Caucasians for two reasons. The first was that random assignment of participants placed a disproportionate number of other ethnicities in the neutral group, and second, the commercials they used had primarily Caucasian actors. The researchers argue that commercials with Caucasian actors would not be a relevant comparison group for the non-Caucasian participants.

### What is Body Image?

Ideal physical images presented in advertising media create unrealistic standards for the average woman to measure herself against. Viewing these

images is likely to have a negative impact on body satisfaction. Gallagher (1986) describes a woman's body image in terms of a psychological construct. Markus (1977) further identifies body image as part of self-schema, or how a woman views herself. Myers & Biocca (1992) suggest that body image is unstable, and thus highly responsive to social cues. They use the term "elastic body image" to describe this phenomenon. Kalodner (1997) offers further support that body image does appear to be highly responsive to social cues. However, research has not explored whether or not the negative response actually is temporary or more long lasting. Perhaps body image is unstable and easily influenced, but the result of body image is a self-schema that is resistant to change. If a woman primarily experiences negative or unrealistic influences on her body image, she may create a negative self-schema.

Myers and Biocca (1992) suggest four components of a woman's present body image. The first is the socially represented ideal body. This is the image that society identifies as the ideal woman, which is commonly portrayed in media representations of women.

The second component is her internalized ideal body. This component is affected by the idealized images the woman has come to incorporate into her own ideal self. Both Banner (1986) and Myers, et.al. (1992) have posited that positive and negative stereotypes influence the social formation of the ideal woman. These ideals are then internalized by women at a young age resulting in conformity to these internalized ideals. Silverstein, et al. (1986) present their view on the formation of ideals: "...present day women who look at the major



mass media are exposed to a standard of bodily attractiveness that is slimmer than presented for men and that is less curvaceous than that presented for women since the 1930s" (p.531). The authors continue by stating "the media are likely to be among the most influential promoters of such thin standards" (p.531).

The third component is the present body image, which is elastic and easily altered. This body image varies as its reference points change. An example of a reference point is current cultural standards of attractiveness. The authors use the example of fashion, in which a reference point may change with time from Twiggy to Madonna. The present body image can also shift with mood, evaluation, or social cues.

The final component of body image is the "objective" body shape. The authors caution that objective body shape is not completely objective, as it is viewed through one's present body image. It is meant to describe how the reality of body shape interacts with a woman's ideal body image. However, this "objective" view is vulnerable to distortion. According to the authors, distortion may occur due to psychological pressure of the contrast between an internalized body image and an objective body shape. The further from the internalized ideal that the objective image gets, the more likely the objective image will become distorted and exaggerated in size.

Quite a few studies have been done to assess both women's and men's perceptions of their bodies. The studies presented here all used an undergraduate student population. Mintz and Betz (1986), found that the majority of normal-weight women perceived themselves as overweight and the

underweight women perceived themselves to be "normal" weight. Research by Betz, Mintz, and Speakmon (1994) found that, on average, the discrepancy between actual and reported weight for women was 5.6 pounds, while for men was only 3.0 pounds. The women in their study were also more likely to describe themselves as overweight--58% of women described themselves this way compared to only 28% of men. According to these two studies, the body image of many college women is distorted toward being overweight.

In a study comparing women with eating disorders and controls, 91% of the patients reported comparing their body to others. Strikingly, 77% of control participants also reported comparing their bodies to others. In the male sample, only 44% of participants reported this comparison. The study also examined how romantic relationships impacted women's body image. Of the female participants who reported partners commenting on their bodies, 67% stated the comments were negative (Murray, Touyz, & Beumont, 1995).

For most women, the pursuit of the ideal body inevitably leads to dieting. In some women, this leads to an eating disorder. Garfinkel and Garner (1982) explain how losing weight is characterized by a sense of control for eating disordered women. The authors state that women with anorexia nervosa respond to social pressures by excessively controlling weight, which becomes associated with beauty and success. Myers, et. al. (1992) elaborates by explaining that all fears and concerns are managed by preoccupation with body weight.

Women with eating disorders are not the only ones at risk for negative body image. Non-eating disordered women also demonstrate concern about

their bodies and frequently overestimate their body size (Birtchnell, Dolan, & Lacey, 1987). More than 95% of non-eating disordered women overestimate their body size by an average of 25%. Two of five women overestimated at least one body part by 50% (Thompson, 1986).

Tantleff-Dunn and Thompson (1995) examined body image as it pertained to romantic relationships. The results indicated that women's level of body satisfaction was related to their perception of their partner's preferred body size. Thus, the women in this study compared themselves to the type of person they thought their partner would desire. How did these women choose their partner's ideal woman? There is no certain answer, but media influence is one possible hypothesis. Both television and print media are filled with ideals, for both men and women. A media influence may also help explain the distorted perception of body weight in college women. Compared to society's image of the ideal woman, the average American woman usually falls short.

### Striving For The Ideal

Although the average woman falls short of society's ideal, there are many rewards associated with attaining this ideal. Unger (1979) suggests that women's appearance contributes to their level of social and economic success. Women's attentiveness to their appearance may dictate how they are perceived and judged by others. Unger remarks that this attentiveness may be unconscious and beyond the women's knowledge. The sociocultural model states that current societal standards for beauty increasingly emphasize the desirability of thinness (Thompson & Heinberg, 1993).

Women strive for an ideal image similar to the one presented in the media. Wolf (1991) states that only 1 in 40,000 women meet the criteria of a typical model's size and shape. However, many women feel pressure to conform to this unrealistic and virtually impossible ideal. It has been suggested that failing to conform to social ideals can lead to depression. Brown and Gilligan (1992) suggest that women's pursuit of interpersonal intimacy, as well as the cultural ideal for women, can produce a loss of self. This results when women begin to censor their own feelings and ideas in order to conform to cultural standards for women.

Learned helplessness contributes another piece to the origin of depression in women. This theory suggests that depression is the result of attributing uncontrollable experiences to internal causes. Since women cannot completely alter their physical appearance, they may experience shame and anxiety regarding their bodies. Achieving the ideal body is out of women's control, as is how others perceive their physical appearance (Fredrickson & Roberts, 1997).

### How We Process Advertisements

Knowledge of how we process advertisements is helpful in order to understand the influence of advertising. Lautman (1991) suggests that advertising represents an ideal, future self that can be attained by use of the advertised product. Marchand (1985) notes that people would rather identify with ideal portrayals of themselves as they desire to be rather than as they are. These ideal images represent the value systems and perceived realities of

advertising agencies, photographers, and editors (Zimmerman, Kauffman, & Leifer, 1988). As Barthel (1988) notes, provocative illustrations of women and female body parts are paired with overtly sexual copy to sell products ranging from food to beauty products.

The majority of print advertisements contain three components: visual information, verbal information, and brand name of the product (Schmitt, Tavassoli, & Millard, 1993). However, these components may not always be related within an advertisement. An advertisement may contain a relationship between any, all, or none of these three components. It has been demonstrated that interactive advertisements, which relate at least two components, are better recalled than non-interactive advertisements (Lutz & Lutz, 1977). Furthermore, research has shown that pictures or picture-text combinations are better remembered than text alone, which is referred to in the literature as a picture superiority effect (Childers, Heckler, & Houston, 1986; Childers, & Houston, 1984).

This phenomenon can be explained by the cognitive theory of spreading activation. This theory states that activation spreads along paths of a network of interconnecting nodes (Anderson, 1995). For example if one hears the word “dog” the related nodes “bone” and “fetch” may be partially activated. This results in unconscious priming, or associative priming of this knowledge. Therefore, the concepts associated with “dog” will be more easily retrieved from memory. Schmitt, Tavassoli, and Millard (1993) suggest that pictures are remembered better because they are more easily accessed in memory than words.

Specifically, a node linked to a picture may be activated more easily during spreading activation.

Information that pertains directly to the consumer may result in increased processing of advertising information and enhanced effectiveness of the advertisement (Debevec & Romeo, 1992). This cognitive process, referred to as self-referencing, may contain an evaluative and affective quality (Rogers, 1981). Debevec and Romeo (1992) describe self-referencing as a mediator between an individual's perception of an advertisement and his/her attitudes toward the product. The authors expect that the more self-referencing occurs, the more likely the individual is to be affected by the advertisement. Individuals associate the self-referent material with information already in memory in order to attach meaning to the stimulus information. In other words, self-referent material is fit into the schema associated with that information. The authors found that the more that individuals self-referenced an advertisement, the more favorable their attitudes were toward that product. The authors present this finding as evidence that self-referencing is a desirable feature of persuasion advertising. More than simply encouraging consumers to think of themselves, the persuasive context of self-referencing encourages them to associate the product with themselves (Yalch & Sternthal, 1985).

Snyder (1987) suggests that certain people are more likely to self-reference, which he refers to as self-monitoring. High self-monitors are more concerned with self-presentation and monitor their social environment to

determine their behavior. In contrast, low self-monitors focus more on their internal states to guide behavior.

### Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) presented by Petty and Cacioppo (1981, 1986) provides a general framework for the study of persuasion in social psychology. This theory also has applications to the field of advertising. The ELM is useful in predicting changes in attitude toward an advertised brand depending on which route toward change is addressed. There are two routes toward attitude change: the central and the peripheral. The central route uses arguments to change attitudes. These arguments are messages contained in the advertisement that are considered important for evaluating the brand. The peripheral route refers to several ways in which the consumer's brand attitude may be changed. Some examples of peripheral routes are heuristic inference of brand quality from an advertising message, association of the message elements with the brand, and mere exposure to the brand.

Elaboration refers to the manner in which the consumer processes the advertising information. This could be the learning of arguments, generation of thoughts about these arguments (cognitive responses), and the integration of these arguments into one's attitude about the brand. Thus, the Elaboration Likelihood Model predicts the likelihood of attitude change based on the route of the message and the level of elaboration given the message.

The probability of a message following the central route depends on two factors: the motivation and ability of the consumer (Scholten, 1996). Motivation

refers to whether or not the consumer wants to assess the qualities of the advertised brand while ability refers to whether or not the consumer can assess these qualities. In order for the central route to be followed, both high motivation and high ability must be present. However, if the motivation and the ability are low, it is likely that the peripheral route of processing will be followed. The ELM follows a continuum in which the probability of following the central route changes continuously with the levels of both motivation and ability. This continuum ranges from a high likelihood of following the central route to a 50-50 likelihood of following either route, to a high likelihood of following a peripheral route. Following this model, the ELM suggests the importance of argument quality under high elaboration conditions and the importance of cue attractiveness under low elaboration conditions.

The ELM further suggests that attitudes changed by central routes are more persistent, resistant to change, and predictive of behavior than those changed by peripheral routes. However, Petty and Cacioppo (1983) acknowledged that peripherally changed attitudes may become relatively persistent as a result of repetition of the advertisement. Peripheral cues may influence product-relevant thinking along both the central and peripheral routes (Scholten, 1996). This provides some evidence for the importance of the peripheral route in changing attitudes toward a product.

### Brand Awareness

One means by which advertising is successful at influencing our purchasing behavior is by the establishment of product knowledge. Brand names



become associated with characteristics or qualities of the product. Brand awareness occurs when one is conditioned by raised significance of a certain brand (eye-catching advertisement), followed by the formation of attitudes regarding the brand (thoughts and emotions created by advertisement). Typically, a visual image of the product packaging is all that is necessary to stimulate a response to the brand once brand awareness has been formed (Percy & Rossiter, 1992).

Brand attitude includes both a cognitive and affective component. The cognitive component is what guides purchasing behavior. The affective component actually drives and motivates the behavior. The cognitive component contains specific beliefs about the benefit of a brand. These comprise the reason for the brand attitude (Percy & Rossiter, 1992).

Percy and Rossiter (1992) further divide the affective component of brand attitude into two motivations for purchase: Informational and Transformational. Informational strategies are utilized when a product claims problem removal (pain relievers), problem avoidance (detergents), incomplete satisfaction with a previous version of a product (new and improved products), mixed approach avoidance (low-tar tobacco), and normal depletion (a loyal brand one runs out of, which retailers advertise). On the other hand, transformational strategies are used when products appeal to sensory gratification (dessert products), intellectual stimulation (personal computers), and social approval (cosmetics).

According to the Percy and Rossiter (1992) model, cosmetics fall into the category of low-involvement products. Low involvement products do not

encourage deep processing or strongly held product beliefs in the consumer. Another example of a low involvement product is snack foods. These are contrasted to high involvement products such as cars and homes. Since advertisements for low involvement products are only partially processed by the consumer, advertising claims should be stated (informational) or implied (transformational) in the extreme. Claims for low involvement products need only to be remembered, rather than accepted, by the consumer.

### Memory for Advertisements

Brand Awareness seeks to improve consumers' memory for a product. However, Perfect and Askew (1994) suggest that an advertisement need not be remembered explicitly in order to be memorable. The implication of this finding is that while consumers may not remember viewing an advertisement, they may still be affected by it. In the following study, the authors placed participants in one of two conditions. The participants either viewed advertisements alone or in the context of text. The authors then instructed all participants to rate 50 advertisements, which had already been viewed, on four dimensions: eye-catching, appealing, memorable, and distinctive. The participants were then asked to select from a collection of advertisements those that they had previously viewed and rated. The authors found that participants had difficulty choosing the advertisement they had previously viewed, even those they had rated as more memorable, appealing, distinctive, and eye catching. The participant ratings of advertisements being memorable, appealing, distinctive, and eye catching did not differ whether or not they explicitly remembered an advertisement,

suggesting that a change in attitudes can occur without explicit memory for an advertisement.

### Advertising Strategy

The previous studies demonstrate that advertising is an effective means of communication. This next section explores how advertising strategies influence the consumer. Chaudhuri and Buck (1995) define symbolic communication as socially shared material based upon learned symbols, which have an arbitrary relationship with the referent. The authors propose that the result of symbolic communication is arbitrary cognition. Arbitrary cognition is utilized when the non-product relevant aspects of the advertisement are considered rather than the specific benefits of the product. Non-product relevant material may be anything unrelated to the performance and use of the product, such as the model in the advertisement. Since the inherent features of the product are not considered in arbitrary cognition, advertisements utilizing this strategy should elicit an affective response. Advertisers utilize this method of communication to create beliefs about brand names on the basis of association. The authors refer to Pavlov's (1927) definitive experiments on classical conditioning. They suggest that advertisements attempt to associate a brand name with a nonverbal, affective cue in order to create an association between the brand and the emotional state.

Advertisements that depend on intangible factors unrelated to the qualities of the product, such as attractive models, have been shown to be higher in emotional appeal than advertisements that focus on specific product qualities (Preston, 1968). This is successful because arbitrary strategies use mood

arousal techniques to pair a product with a positive affect (Chaudhuri & Buck, 1995).

Viewing advertisements that create affective associations results in arousal and a vicarious participation in the perceived subjective experience of the model in the advertisement (Chaudhuri & Buck, 1995). The consumer associates the brand with the generated emotion and perceives the brand as a means of achieving the portrayed reward. Richins (1991) held focus groups with female college students and discovered that exposure to ideal images may lead to increased optimism and motivation, if the image is considered attainable. The purpose of advertisements is to create a scenario in which the consumer associates a product with a desired outcome.

Gould (1987) suggests that advertisers attempt to increase anxiety and self-consciousness about women's bodies in order to sell a product. A study by Kalodner (1997) supports this hypothesis. Kalodner demonstrated that viewing ideal female image advertisements increased women's self-consciousness and state anxiety.

### Advertising Effects

Chaudhuri and Buck (1995) contrast advertising strategy with advertising effects. According to the authors, advertising strategy consists of the executional elements in the content and form of an advertisement that are aspects of the advertisement itself (p.423). Advertising effects are the reactions evoked in an individual as a result of viewing an advertisement.

The female body is often used to elicit fears and insecurities in the female consumer (Henderson-King & Henderson-King, 1997). The authors state, however, that the potentially harmful effect of media images on women's body dissatisfaction and self-esteem has not been demonstrated by strong and consistent research findings. Various studies have linked exposure to television to stereotypical gender roles (Lanis & Covell, 1995; Kimball, 1986), less criticism of sexual harassment (Hansen & Hansen, 1988), diminished career orientation in women (Geis, Brown, Jennings, & Porter, 1984), and less confidence and higher levels of conformity in women (Jennings, Geis, & Brown, 1980).

Stice, Schupak-Neuberg, Shaw and Stein (1994) found that women's endorsement of traditional gender roles was related to internalization of ideal-body stereotypes. The internalization of ideal-body stereotypes predicted women's body dissatisfaction. The authors suggest that women with low self-esteem may be likely to internalize societal standards for the ideal body. They suggest that further research be directed at factors that interact with societal influences in the development of negative body image.

Since social comparison is the prevalent method by which we learn about ourselves and the world, examining the effects of social comparison as manipulated by advertisers is important. Advertising goals are to increase product sales and the methods for achieving this success includes taking advantage of women's desire to be more attractive. As noted in the above research, advertising is deliberate and finely honed to produce the maximum effect. Placed against a backdrop of society's reverence for beauty that is a largely unattainable standard,

advertisers utilize the natural tendency towards social comparison as a way to promote their products. By pointing out an "insufficiency" in the consumer, a company is able to provide their product as a solution to the consumer's beauty shortcomings.

### Purpose and Hypotheses

The study described below examines how beauty advertisements in women's magazines affect women in relation to mood and body dissatisfaction. Gender role affiliation was also assessed to explore the role it plays in viewing advertisements. It is hypothesized that viewing advertisements in the unaltered condition will produce an elevation of mood because women will engage in social comparison with the female model and identify use of the advertised product with the desired outcome of attractiveness. This will create a positive feeling in which the women are hopeful that use of the product will produce the desired change. Viewing advertisements that contain only the female model, without the product, will produce a decrease in mood because the women will engage in social comparison but not experience hope for a positive change due to the absence of the product. In the control condition, it is hypothesized that the product alone will produce no changes in mood. Gender role affiliation was examined to identify how the construct interacts with changes in mood and body image. It is proposed that women with more traditional gender role affiliation will demonstrate a larger effect from the experimental manipulations than women who identify with less traditional gender roles.

## Chapter 2

### Method

#### Participants

Participants in this study were 144 undergraduate women. The participants were Psychology 100 students who received course credit for their participation in this experiment. Participants were included in this study if they were between the ages of 18-22. Participants who were not in this age range were excluded from the study.

Participants were screened during the Psychology 100 screening with the Eating Disorders Inventory (EDI) and an equal number of participants were placed in high and low body dissatisfaction groups, using the Body Dissatisfaction scale of the EDI. Based on the median score for this sample, a cutoff score was determined. Participants whose score fell below this cutoff score were placed in the low body dissatisfaction group, while those whose score was higher than the cutoff fell into the high body dissatisfaction group.

#### Materials

The measurement of mood used in this study was the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). According to the authors, positive affect (PA) and negative affect (NA) has been identified as separate and unique dimensions rather than opposite constructs. Positive affect describes how enthusiastic, active, and alert a person is at the time of measurement. High energy and full concentration is representative of high PA while sadness and lethargy characterize low PA. High NA involves

subjective distress that can be displayed as anger, disgust, guilt, fear, and nervousness. Calmness and serenity would be features of low NA.

The psychometric data for the PANAS was gathered from undergraduates enrolled in psychology courses at Southern Methodist University (Watson, Clark, & Tellegen, 1988). The PANAS scores demonstrate reliability as the alpha coefficients range from .86 to .90 for the PA scale and from .84 to .87 for the NA scale. The test authors contention that the PA and NA scales measure separate dimensions is supported as the correlation between scales is low, ranging from -.12 to -.23. The two scales share 1-5 % of their variance.

In order to assess the reliability of the PANAS, a principal factor analysis was performed in which two dominant factors emerged in each solution (Watson, Clark, & Tellegen, 1988). These factors accounted for approximately two thirds of the common variance, ranging from 62.8% in the moment solution to 68.7% in the general ratings. The authors concluded the both PANAS scales are highly correlated with the corresponding regression-based factor scores in each solution. The convergent correlations ranged from .89 to .95 and the discriminant correlations ranged from -.02 to -.18. The PANAS also correlates well with other measures of mood, such as the Hopkins Symptom Checklist and Beck Depression Inventory.

A reliability analysis was performed for the data in this study, using Cronbach's alpha. The reliability coefficients for positive affect were .84 at time 1 and .86 at time 2. The reliability coefficients for negative affect were .89 at time 1 and .83 at time 2. This suggests that the scores on the PANAS for this sample



were reliable. The scores for this sample are similar to those previously found by the authors of the measure (see above).

Body dissatisfaction was measured using the body dissatisfaction scale of the Eating Disorders Inventory. The EDI was developed as a way to discriminate between clinical and non-clinical groups with regard to eating disorders. It has demonstrated value as an research, as well as a clinical, tool (Klemchuk, Hutchinson, & Frank, 1990).

The EDI is a self-report instrument, comprised of 64 items. These items are rated on a six point scale and form eight subscales (drive for thinness, bulimia, body dissatisfaction, ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears). The EDI manual provides norms for both clinical and non clinical groups as a guide in considering an individual profile. There is not a cutoff score to indicate the presence of a eating disorder; each profile must be examined individually. Internal consistency and validity have been demonstrated as adequate. In research by Garner, Olmstead, & Polivy, (1983), Cronbach's alpha ranged from .82 to .90 for anorexic individuals and from .65 to .91 for a normal female comparison group. Further, discriminant function analyses demonstrated the ability of each subscale to differentiate between women with anorexia nervosa and a female comparison group. Each of the subscales was significantly correlated with established measures of similar conceptual constructs.

Gender role attitudes were measured using the Attitudes Toward Women Scale (AWS). This measure assesses people's beliefs about "responsibilities,

privileges, and behaviors in a variety of spheres that have traditionally been divided along gender lines but could, in principle, be shared equally by men and women" (Spence & Hahn, 1997, p. 18). Despite the title, the AWS is a measure of attitudes towards women's rights, rather than attitudes toward women (Eagly & Mladinic, 1989). According to McHugh and Frieze (1997), the 15-item brief version of the AWS is the most widely used measure of gender role attitudes. However, the instrument has several disadvantages. Since its development in the 1970's, gender role attitudes have shifted in a more egalitarian direction. As a result, ceiling effects have been found in which the AWS does not discriminate well at the liberal end of the continuum (Spence & Hahn, 1997). Data from Spence and Hahn (1997) suggest that there is still adequate variability in scores despite the skewed distribution. Another disadvantage is the outdated wording on some items. The use of the 15 item short version of the AWS eliminates most of these problematic items, but a few do remain.

### Procedure

A pilot study using a focus group of college women was conducted to determine which magazines are popular with female students as well as to investigate attitudes towards advertisements. This research determined the magazines from which advertisements were selected for the primary study. Advertisements were selected from each target magazine. In order to be considered for this study, an advertisement had to contain one woman (with at least 3/4 of body from head to mid-thigh visible) and one product. The advertisements also had to contain text relating to the product. Each

advertisement contained approximately the same amount of text. The sample of advertisements selected for this study was chosen from advertisements for beauty products. Advertising for beauty products utilizes the strategies discussed above to create an image of the product as creating a desired change, such as increased attractiveness.

There were three groups in this study: two experimental groups and a control group. The first experimental group was shown an unaltered appearance-related advertisement with no modifications (model + product + text). An appearance-related advertisement is one in which the woman is presented in such a way that her appearance is the principal feature of the advertisement (e.g. posed provocatively and clothed to accentuate physical features). The second experimental group was shown a computer-manipulated version of the appearance-related advertisement containing only the female model, with the product and text removed (model only). The control group was shown a computer-manipulated version of the advertisement showing the advertised product and text (product + text). In all three conditions, the size of the advertisements was 8 1/2"x 11".

In the product + text condition, the font size of the text was increased so that it was a more prominent feature of the advertisement. It was hoped that by manipulating the text in this manner, the absence of the female model from the advertisement would not be noticed. Participants would then view the stimulus as a complete advertisement, rather than one that was computer manipulated.

The procedure for all three groups was the same except the version of the advertisements shown to participants varied. This study was conducted with groups of approximately six participants per session. The sessions were held in a classroom with adjacent smaller private rooms. In order to avoid group effects, each participant was placed in a room by herself to complete the experimental material. The experimenter explained the informed consent to the participant and presented her with an envelope and the PANAS. The participant was asked to complete the initial measure. She was then asked to place the measures in the envelope when she finished and begin viewing the binder containing the target advertisements as well as several non-appearance related articles selected from Compton's Encyclopedia on CD-ROM. The articles described travel and culture in various cities in North America. Participants were told they are viewing a prototype for a new type of magazine and the experimenter was interested in their general impressions of the material. This was intended to facilitate a naturalistic viewing of the material. The participants were able to view the advertisements as they would in real life, with the advertisements appearing amidst articles. No further instructions were given as to how to view the material.

At the conclusion of the viewing, participants were asked to complete the PANAS as well as to answer several questions regarding their general impressions of the material. They were asked what they liked about the magazine, what they did not like about it, and if they would buy the magazine in the future. Directions specific to the administration of these instruments were given.

Participants were told at this time that they were participating in a study of attitudes and self-perceptions of college women. At the conclusion of the measures and before participants were dismissed, they were debriefed and thanked for their participation.

## Chapter 3

### Results

#### Overview

Participants were divided into six groups as follows: those with high body dissatisfaction and low body dissatisfaction were randomly assigned to one of three groups. The first group viewed the original unaltered advertisement (model + product + text), the second viewed the model only, and the third viewed the product + text. Each participant completed the PANAS mood measure before and after viewing of the simulated magazine. A 2X2X3 Repeated Measures Mixed Model Analysis of Variance (body dissatisfaction X time X condition) was performed to examine whether the PANAS scores changed over time. An Analysis of Variance was also performed for Time 1 and Time 2 separately to identify whether the PANAS scores were significantly different across groups.

#### Gender Role

Initial analyses of both positive and negative mood considered gender role orientation as a covariate to control for the relationship between this variable and mood. The scores on the Attitudes Toward Women Scale demonstrated a negatively skewed distribution with a possible ceiling effect (mean=38.24, s.d.=4.65, range=21-45).

Gender role did not appear to have significantly affected the scores on the PANAS. A correlational analysis using the Pearson product-moment correlation coefficient was conducted for the following variables: gender role orientation, positive mood (time 1), positive mood (time 2), negative mood (time 1), negative

mood (time 2), and body dissatisfaction. The purpose of the correlational analysis was to determine whether or not gender role orientation covaried with the PANAS mood measure. No significant correlation was found between gender role orientation and positive (time 1:  $r = -.01$ ,  $p > .05$ ), (time 2:  $r = -.04$ ,  $p > .05$ ) or negative mood (time 1:  $r = -.05$ ,  $p > .05$ ), (time 2:  $r = -.05$ ,  $p > .05$ ). This suggested that gender role orientation did not affect mood. For this reason, further analyses were conducted examining mood change without using gender role as a covariate.

### Body Dissatisfaction

Body dissatisfaction was also analyzed to determine whether the categorization of high or low body dissatisfaction influenced the mood ratings after viewing the simulated magazine. A 2X2X3 Repeated Measures Mixed Model Analysis of Variance (body dissatisfaction X time X condition) did not demonstrate statistical significance for the proposed influence of body dissatisfaction on ratings of negative affect across time ( $F(1, 144) = .09$ ,  $p = .77$ ). Another 2 X 2 X 3 Repeated Measures Mixed Model ANOVA (body dissatisfaction X time X condition) did not demonstrate statistical significance for the influence of body dissatisfaction on positive affect across time ( $F(1, 144) = 1.22$ ,  $p = .27$ ).

### Mood

Participants in each of the six groups rated their subjective mood at time 1 and time 2. The means for each group at time 1 and time 2 can be found in Table 2. Parallel analyses were run for positive and negative mood. No significant

changes occurred for the positive mood variable. The 2X2X3 Repeated Measures Mixed Model Analysis of Variance (body dissatisfaction X time X condition) indicated no significant changes in positive mood over time ( $F(5, 144)=.545, p=.742$ ).

The 2x2X3 Repeated Measures Mixed Model ANOVA using affect as the dependent variable (body dissatisfaction X time X condition) indicated a significant main effect for time, indicating that negative affect changed over time. The mean negative affect score at time 1 was 13.97 which was significantly greater than the mean at time 2, which was 13.14 ( $F(1, 144)=10.20, p=.002$ ). This ANOVA information is presented in Table 1. An interaction effect was found for time and condition, indicating that negative mood changed in different ways in the three conditions ( $F(2, 144)=3.72, p=.027$ ).

In order to determine how negative mood in the three conditions changed over time, a series of three one-way repeated measures ANOVAs were completed. These determined that negative mood changed in the product + text condition ( $F(1, 144)=16.27, p=.00$ ) but not in the original (model + text + product) or model only conditions ( $F(1, 144)=.08, p=.78$ ), ( $F(1, 144)=1.60, p=.21$ ). This information is summarized in Table 3.



Table 1

Means, Standard Deviation Scores for Negative Mood Measurement

<u>Condition</u>	<u>Time 1</u>		<u>Time 2</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
High Body Dissatisfaction				
Original Advertisement	15.33	6.82	15.25	5.24
Model Only Advertisement	13.50	4.50	12.96	3.97
Product + text Advertisement	15.71	6.33	13.63	6.16
Low Body Dissatisfaction				
Original Advertisement	12.63	3.59	12.46	3.31
Model Only Advertisement	13.63	4.38	13.04	3.40
Product + Text Advertisement	13.00	3.39	11.50	2.02

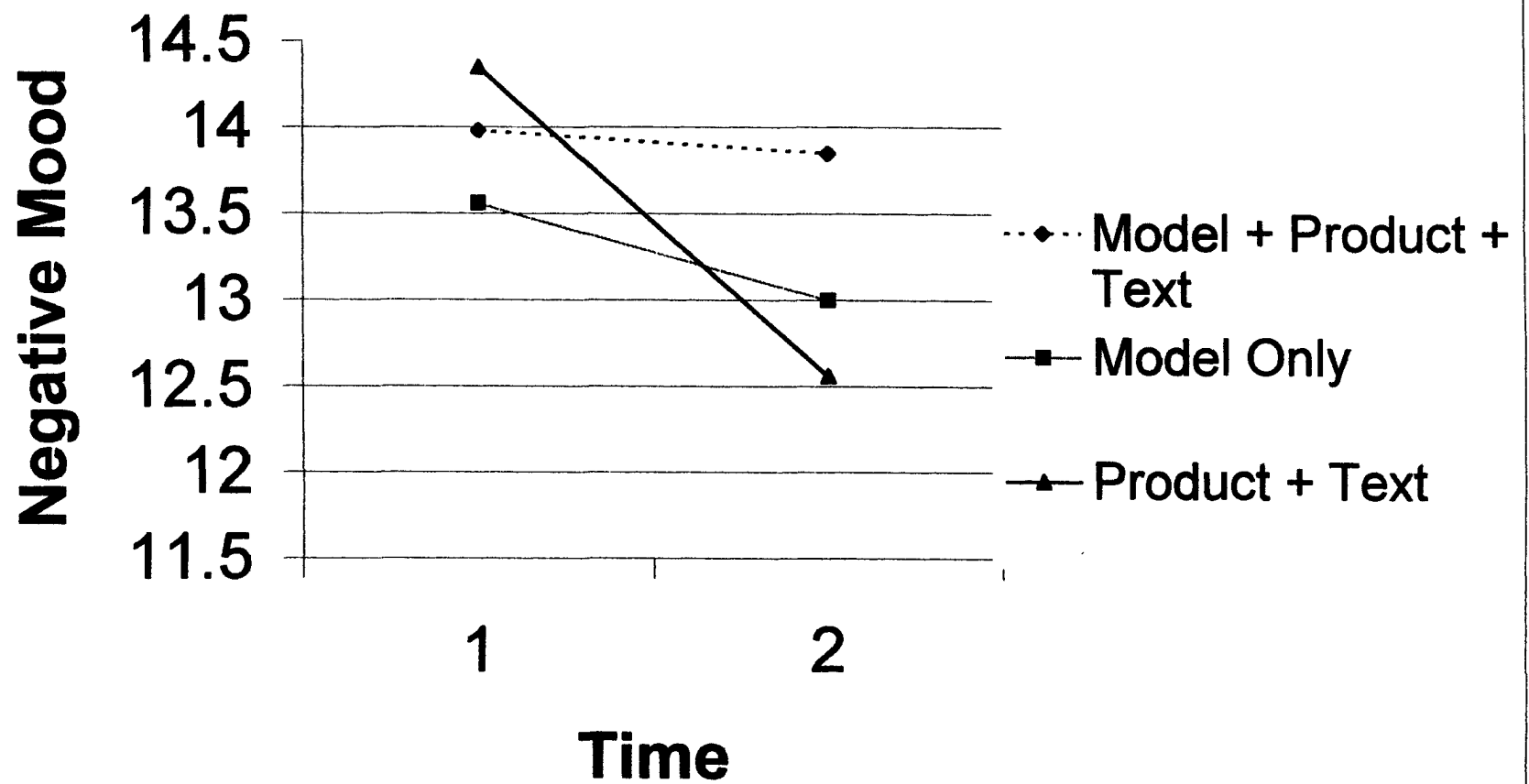
Table 2

2X2X3 Repeated Measures Mixed Model Analysis of Variance for Body dissatisfaction X Time X Condition (using negative mood as the dependent Variable)

Source	SS	DF	MS	F ratio	Sig. of F
Time	49.17	1	49.17	10.20	.002**
Time X Condition	35.84	2	17.92	3.72	.027*
Time X Body Dissatisfaction	.42	1	.42	.09	.77
Time X BodyDis X Condition	1.67	2	.84	.17	.84
Error	665.40	138	4.82		

\*  $p < .05$     \*\*  $p < .01$

## Change in Mood



A one-way ANOVA for the three conditions indicated that there was no difference between the groups at time one ( $F(2, 144) = .29, p = .75$ ). A second one-way ANOVA indicated that there was no significant difference between the groups at time two ( $F(2, 144) = 1.11, p = .33$ ). This information can also be found in Tables 4 and 5.

Table 3

Analysis of Variance for Condition X Time

Source	SS	DF	MS	F	Sig. of F
Condition 1 X Time	.38	1	.38	.08	.78
Condition 2 X Time	7.59	1	7.59	1.60	.21
Condition 3 X Time	77.04	1	77.04	16.27	.00**
Error	667.49	141	4.73		

\*\*  $p < .001$

Table 4

Analysis of Variance for Condition at Time 1

Source	SS	DF	MS	F	Sig. of F
Intercept	28084.17	1	28084.17	1088.54	.00
Time X Condition	15.06	2	7.53	.29	.75
Error	3637.77	141	25.80		

Table 5

Analysis of Variance for Condition at Time 2

Source	SS	DF	MS	F	Sig. of F
Intercept	24858.78	1	24858.78	1333.85	.00
Time X Condition	41.43	2	20.72	1.11	.332
Error	2627.79	141	18.637		

## Chapter 4

### Discussion

#### Overview

As noted above, a main effect for time was found for the negative affect scale of the PANAS. An interaction was also found between negative mood and condition: The product + text condition produced a significant change in negative mood from time 1 to time 2, while the others did not. On the PANAS scale, negative affect is defined as subjective distress that can be displayed as anger, disgust, guilt, fear, and nervousness. Calmness and serenity are features of low negative affect. Positive affect describes how enthusiastic, active, and alert a person is at the time of measurement. High energy and full concentration is representative of high PA while sadness and lethargy characterize low PA.

#### Change in Mood

The change in mood for the product + text condition was unexpected as this was proposed as a control condition. It seems that there is a quality about this condition that serves to decrease negative affect. The original (model + product + text) and model only model condition did not demonstrate this effect. It was originally proposed that these two would be the experimental conditions that would have an effect on mood because of the presence of the model only model alone or accompanied by persuasive text. However, this was not the case. The advertisement that contained persuasive text and the product image is the condition that caused a change in mood. The change in negative mood over time, while significant, was also fairly subtle. This was indicated by the finding

that although mood did change over time, there were no differences between the three groups at either time 1 or time 2. This suggests that all three groups changed similarly over time and the change in group three was enough to gain significance.

Below, the specific characteristics of each category of advertisement are considered in order to better understand factors that may have influenced mood change in the product + text condition.

#### Qualities of the Advertisements in each Condition

The original (model + product + text) advertisement contains a female model, a picture of the product, and persuasive text describing the product's perceived features and benefits. When viewing this advertisement, one can observe any or all of the preceding characteristics. Past research has demonstrated an elevation in mood after viewing this type of advertisement and has attributed the change to the combination of a social comparison target (e.g. female model) with the means to obtain the desired outcome (e.g. beauty product) (Heinberg & Thompson, 1995). In the current study, however, this finding was not supported. It appears that women's mood is not changed significantly by viewing this type of advertisement.

The model only condition was created by computer to contain only the female model in the advertisement. It is simply a picture of the female model with the text "Product removed due to copyright restrictions" on the top of the page. There is not a product to view or persuasive text to read, but simply a social comparison target. This condition presents an opportunity for social comparison



without a persuasive message that a certain product will facilitate achievement of the desired ideal. It was hypothesized that mood would be negatively affected because the female model alone would induce hopelessness regarding achievement of the ideal. However, the current study does not support this hypothesis. Viewing this condition did not change mood, but rather maintained pre-viewing mood levels.

The product + text condition contains simply the product with persuasive text. The product is placed on the page to suggest that the advertisement is complete and not missing the female model. This condition was conceptualized as being a control with which to compare the other two conditions. However, this is the only condition in which a significant mood change occurred, suggesting that there is a quality about this condition that actually decreased negative mood. As this result was unexpected, exploring various hypotheses that explain this finding may provide a better understanding of the interaction of mood and social comparison.

The fact that the product + text condition does not contain the female model suggests that one factor that may influence mood is the presence of text in the absence of the female model may influence mood. This explanation assumes that the participants actually read the text associated with the products when text was present in the advertisement.

#### Qualities of the Text within Advertisements

The text typically associated with beauty products is hopeful and encouraging. It uses persuasive language to assure the reader that a certain

product will produce positive results and improve appearance. This text instills hope in the reader that use of the product will have many benefits. The female model serves as a visual reminder of the ideal that many women hope to achieve. Previous research has attempted to explain a positive mood increase after viewing advertisements by this instilling of hope principle. When a woman views an advertisement, the female model initiates a social comparison process resulting in a feeling of inadequacy. Conveniently located next to this social comparison target is a “remedy” for the consumer’s perceived shortcomings—the beauty product. Consequently, the final mood would be a positive one.

The current study was intended to extend this positive mood finding and determine if the finding could be replicated. However, the phenomenon was not replicated in this study. Neither of the advertisements containing the female model demonstrated a change in mood. On the basis of this finding, it seems that there is another process that can better explain how the female model in beauty advertisements affects women. Identifying alternative models of this effect may determine future research directions in this area. Alternative explanations are discussed below.

#### Text as a Mediator of Mood Effects

The alternative explanation of this process assumes that the participant has read the text associated with a product when it was present in the advertisement. This allows the hypothesis that the persuasive text does instill hope and encouragement for obtaining the ideal. This would explain the decrease in negative mood in the product + text condition. Participants exposed

only to the text experienced hope of obtaining the ideal and were able to visualize future improvements in appearance. Perhaps the presence of the female model reduces hope, even in the presence of persuasive text. Viewing the female model may actually highlight the discrepancies between the participant's actual self and ideal self. The realization that the ideal is impossible to obtain may moderate the effects of the persuasive text. Although negative mood did not increase in response to the female model, it is possible that the female presence prevented the decrease in negative mood found in the product + text condition.

While this explanation fits the original (model + product + text) advertisement condition, it does not explain the null findings from the model only condition. In this condition, there was no persuasive text to instill hope, which suggests that negative mood would increase. However, this was not the case. It is possible that participants remained hopeful about obtaining the ideal except when the female model was present. Perhaps, regardless of text, participants felt more hopeful in the absence of the female model. In the model only condition, the text "Product removed due to copyright restrictions" which explained that the model was part of an advertisement and may have triggered associations of previously viewed beauty advertisements. The awareness that the model only model condition was really an advertisement may have prompted participants to view the model in the context of hopeful thoughts of obtaining an ideal. It is also possible that participants were aware of which product the female model

represents. This knowledge would further facilitate improvement-oriented thoughts.

### Female as a Moderator of Mood Effects

It is also possible that participants did not read the text and simply looked at the pictures in the advertisement. This could also explain the pattern of results that were found in this study. In both the original (model + product + text) advertisement and the model only advertisement, simply viewing the female model may have prevented a mood shift, producing the null result. Viewing the product alone, however, could have induced a decrease in negative affect. This may explain why a positive effect on mood was not found in the original (model + product + text) advertisement condition. If the persuasive text was not read, then there was not an opportunity for hope to be instilled in conjunction with viewing an ideal image. Thus, mood would not improve. However, this does not explain why negative mood did not increase in either the original (model + product + text) or model only condition.

One possible reason for this finding is that viewing of a social comparison target does not negatively affect mood. Perhaps women are accustomed to viewing these types of images because they are so prominent in our culture. The constant exposure to these images has caused them to become a neutral stimulus. Viewing such images is such an everyday occurrence that it is hardly noticeable or distressing. It is also possible that the female model, product, and text do not act as orthogonal variables, but interact in complex ways. The viewer

might, for example, read the text in the presence of the product but not in the presence of the product plus the female model, or vice versa.

### Role of the Articles in Viewing Advertisements

The inclusion of travel articles placed alongside beauty advertisements in the simulated magazine may have influenced the manner in which participants viewed the material. There may have been a task demand, creating a tendency for the participants to read the travel articles rather than skim the magazine as they might a women's magazine. Magazines targeted at women typically feature beauty advertisements interspersed with articles on beauty, health, or relationships. Perhaps women are more likely to skim these types of articles because they do not perceive the subject matter as serious. Participants may have perceived the travel articles as important to this study and given them more attention as a result. If participants gave the articles in the simulated magazine increased attention, they may not have viewed the magazine as they would in a naturalistic environment. The increased focus on the articles may have prevented the participants from adequately viewing the advertisements.

Spending more time reading articles than viewing advertisements may have improved the participants' mood in the product + text condition. In this condition, the participants may have found the advertisements boring, as they contained just the product and text. As a result, more time may have been spent reading the articles. This suggests that there is a quality about the articles that may improve mood, whether related to the articles themselves or simply the act of reading quietly.

### Qualities of the Experimental Session

Perhaps some aspect of the general procedure of the study depressed mood in some way. If this occurred, then viewing the original (model + product + text) and model only conditions may have slightly increased positive mood, resulting overall in no significant change in mood. The product + text condition elevated mood slightly more, which resulted in a significant change in mood in this condition. This explanation is consistent with previous research that reported an increase in mood after viewing advertisements, as well as with the hypotheses of the present study.

### Context of Viewing Advertisements

This study examined the effects of target advertisements interspersed with magazine articles to approximate naturalistic viewing of the advertisements. Participants were asked to view and evaluate a simulated magazine. Perhaps this naturalistic placement affected both the viewing of advertisements and the effects the advertisements had on mood. Similar studies in the literature do not place the advertisements in the context of a magazine, but show them alone, typically on slides (Pinhas, Toner, Ali, Garfinkel, & Stuckless, 1999). These studies have found a significant change in mood and body dissatisfaction after viewing the advertisements.

In the current study, participants had the opportunity to choose to read articles or view advertisements and may have spent less time focusing on the advertisements as a result. In previous research in which the advertisement is

placed alone for viewing, the idealized images may become more obvious and more distressing for the viewer.

Another alternative explanation for the significant findings of previous studies when the advertisement is placed alone is that this method of presenting advertisements may allow the participant to determine the purpose of the study. Knowledge of the study may guide their responses to the experimental material. These types of studies may be producing demand effects.

Viewing an advertisement alone does not represent the way in which people typically view the advertisements. Advertisements are placed within the context of magazines in which the reader's focus is on the magazine's features rather than the advertisements. A recent study presented at the American Psychological Association's 1999 Annual Convention supports the hypothesis that viewing advertisements in a natural context does not have the same effect as viewing the advertisements alone. Stice (1999) designed a study in which adolescent girls were randomly assigned to a 15-month subscription to Seventeen magazine or a control group that received no subscription. It was found that the girls who experienced negative effects as a result of the magazines were those who had previously reported pressure to be thin or a lack of social support. Negative effects were classified as excessive dieting and body dissatisfaction. The author suggests that these results indicate that long-term exposure to idealized images only affects adolescent girls who already have body image concerns.

### Knowledge of Advertising Strategies

Participants' knowledge of advertising strategies was not formally assessed as part of this study. However, during the debriefing, many participants discussed their understanding of how advertising presents an unrealistic image of women due to specific techniques to alter photographs. Quite a few women had taken a course at the University titled "Gender and Communication" which had educated them on specific advertising strategies used to sell beauty products to women. Perhaps the knowledge that participants had about these strategies served as a protective factor in preventing a negative effect on mood after viewing the advertisements. The knowledge of how consumers are manipulated by advertising may change the way in which the advertisements are perceived.

### Gender Role

This study failed to find that gender role influenced affective reactions to advertisements. The Attitudes Towards Women Scale was chosen as a measure of gender role orientation with some concern about its limitations. Although it is widely used to measure gender role attitudes, scores on the measure typically demonstrate negatively skewed distributions. On the liberal end of the continuum, the AWS has difficulty discriminating between scores. This effect was reflected in this study, as well. Most participants scored on the liberal end of the continuum on this measure. This measure may have been inadequate to detect gender role influences.



### Limitations

It is possible that the female model, product, and text do not act as orthogonal variables, but interact in complex ways. If this is the case, then the current study was not able to tease apart these complex interactions. The three components of the advertisement were considered as independent variables.

Another possible limitation of this study is the age range of the participants, which was 18-22. Perhaps the greatest effects on negative mood may be found in younger participants who have experienced less exposure to beauty advertisements. An 18 year-old will have been exposed to a greater number of beauty advertisements and, as a result, may not spend as much time processing the advertisement.

The advertisements used in this study were taken from magazines that the target age group typically reads. It is possible that participants in this study were familiar with the advertisements used and may have recognized the models in the model only condition. Although care was taken to select models that were not well known, it is possible that repeated exposure to the advertisements created an association between the model and the advertised brand.

The text across the model only condition, which indicated that the photograph was an advertisement, may have altered the manner in which the participants processed the advertisement. Knowledge that the female photograph was part of an advertisement may have encouraged the participant to process the image as she would an unaltered advertisement. For example, she might

discount the idealized image and not use it as a target of social comparison because of previous knowledge of advertising strategies.

### Future Research Directions

The findings of this study suggest that naturalistic viewing of advertisements does not produce significant effects on mood. Further research in this area will help to clarify the qualities of naturalistic viewing that appear to moderate a mood effect. Indeed one may wonder whether any kind of negative effects result from naturalistic viewing of advertisements. Because most women view advertisements in the context of magazines, examination of the effects of naturalistic viewing is important. For example, what viewers choose to process about the advertisement in naturalistic conditions may be examined using eye movement studies. This type of research may determine whether viewers look at the advertisements and what parts of the advertisements they may prefer to view. Awareness of how viewers process advertisements in naturalistic settings may lead to alternative hypotheses about the nature of negative mood affects when viewing beauty advertisements.

To understand the effect of the travel articles on mood, a comparison group could be added in which participants read articles, but do not view the advertisements. This would provide information on how the articles are perceived by participants and the effect of the articles themselves on mood.

The use of the Attitudes Toward Women Scale did not present a well-distributed measure of gender role attitudes. Future research using a more sensitive measure of gender role beliefs may provide further understanding of

how traditional or nontraditional gender role attitudes affect the viewing of advertisements.

Considering the possible effects of the text in the model only condition, it would be interesting to examine whether or not this text altered the manner in which participants viewed the female model. Designing a study in which participants viewed a series of female models either with or without the knowledge that the image was part of an advertisement may provide insight into how advertisements are processed differently than other types of images.

Examining how the viewer's knowledge of advertising strategies mediates the manner in which advertisements are viewed would also provide information on how advertisements are perceived. During the debriefing, several participants mentioned that they had taken a class at the University titled "Gender and Communication." Part of this class was spent learning about advertising and the ways in which it presents the idealized standard of beauty. These participants had knowledge of the specific strategies that advertisers use, such as airbrushing to remove flaws. Perhaps knowledge that the models in the advertisements were not reflections of real women moderated the effect of viewing the advertisements. If this is the case, then teaching adolescent girls about advertising strategies may help to prevent or reduce body image disturbances that typically begin in adolescence.

## References

- Anderson, J.R. (1995). Cognitive psychology and its implications. New York: W.H. Freeman and Company.
- Banner, L. (1986). American beauty. Chicago: University of Chicago Press.
- Barthel, D. (1988). Putting on appearances: Gender and advertising. Philadelphia: Temple University Press.
- Betz, N.E., Mintz, L., & Speakmon, G. (1994). Gender differences in the accuracy of self-reported weight. Sex Roles, 30, 543-553.
- Birtchnell, S.A., Dolan, B.M., & Lacey, J.H.(1987). Body image distortion in non-eating disordered women. International Journal of Eating Disorders, 6(3), 385-391.
- Block, J., & Robins, R.W. (1993). A longitudinal study of consistency and change in self-esteem from early adolescence to early adulthood. Child Development, 64, 909-923.
- Block, J.H. (1984). How gender differences affect children's orientations to the world. In J. Block (Ed. ), Sex role identity and ego development (pp. 182-206). San Francisco: Jossey-Bass.
- Blyth, D.A., Simmons, R.G., & Carlton-Ford, S. (1983). The adjustment of early adolescents to school transitions. Journal of Early Adolescence, 3, 105-120.

Bretl, D.J., & Cantor, J. (1988). The portrayal of men and women in U. S. television commercials: A recent content analysis and trends over 15 years. Sex Roles, 18, 595-609.

Brown, L.M., Gilligan, C. (1992). Meeting at the crossroads: Women's psychology and girl's development. Cambridge, MA: Harvard University Press.

Cash, T.F., Cash, D.W., & Butters, J.W. (1983). "Mirror, mirror, on the wall...?": Contrast effects and self-evaluations of physical attractiveness. Personality and Social Psychology, 9, 359-364.

Chaudhuri, A. & Buck, R. (1995). Affect, reason, and persuasion: advertising strategies that predict affective and analytic-cognitive responses. Human Communication Research, 21, 422-441.

Chaudhuri, A. & Buck, R. (1995). Media differences in rational and emotional responses to advertising. Journal of Broadcasting and Electronic Media, 39, 109-125.

Childers, T.L., Heckler, S.E., & Houston, M.J. (1986). Memory for the visual and verbal components of print advertisements. Psychology and Marketing, 3, 137-149.

Childers, T.L. and Houston, M.J. (1984). Conditions for a picture-superiority effect on consumer memory. Journal of Consumer Research, 11, 643-654.

Debevec, K. and Romeo, J. (1992). Self-referent processing in perceptions of verbal and visual commercial information. Journal of Consumer Psychology, 1, 83-102.

Dion, K.L., Dion, K.K., and Keelan, J.P. (1990). Appearance anxiety as a dimension of social-evaluative anxiety: Exploring the ugly duckling syndrome. Contemporary Social Psychology, 14, 220-224.

Downs, A.C., & Harrison, S.K. (1985). Embarrassing age spots or just plain ugly? Physical attractiveness stereotyping as an instrument of sexism on American television commercials. Sex Roles, 13, 9-19.

Eagly, A.H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. Personality and Social Psychology Bulletin, 15, 543-558.

Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.

Fredrickson, B.L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. Psychology of Women Quarterly, 21, 173-206.

Gallagher, S. (1986). Body image and body schema: A conceptual clarification. Journal of Mind & Behavior, 7(4), 541-554.

Garfinkel, P.E., & Garner, D.M. (1982). Anorexia nervosa: A multidimensional perspective. New York: Brunner/Mazel.

Garner, D.M., Garfinkel, P.E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. Psychological Reports, 47, 483-491.

Garner, D.M., Olmsted, M.P., & Polivy, J. (1983a). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. International Journal of Eating Disorders, 2, 15-34.

Geis, F., Brown, V., Jennings, J., & Porter, N. (1984). TV commercials as achievement scripts for women. Sex Roles, 10, 513-525.

Gilbert, D.T., Giesler, R.B., & Morris, K.A. (1995). When comparisons arise. Journal of Personality and Social Psychology, 69, 227-236.

Goodman, M. (1996). Culture, cohort, and cosmetic surgery. Journal of Women and Aging, 8(2), 55-73.

Gould, S.J. (1987). Gender differences in advertising response and self-consciousness variables. Sex Roles, 16, 215-225).

Hansen, C.H., & Hansen, R.D. (1988). Priming stereotypic appraisal of social interactions: How rock music videos can change what's seen when boy meets girl. Sex Roles, 19, 287-316.

Heinberg, L. & Thompson, J.K. (1995). Body image and televised images of thinness and attractiveness: A controlled laboratory investigation. Journal of Social and Clinical Psychology, 14, (4), 325-338.

Heinberg, L., & Thompson, J.K. (1992). Social comparison: Gender, target importance ratings, and relation to body image disturbance. Journal of Social Behavior and Personality, 7, 335-344.

Helgeson, V. S. , & Mickelson, K.D. ( 1995). Motives for social comparison. Personality and Social Psychology Bulletin, 21, 1200-1209.

Henderson-King, E. & Henderson-King, D. (1997). Media effects on women's body esteem: social and individual difference factors. Journal of Applied Social Psychology, 27, 399-417.

Jackson, L.A., Hodge, C.N., Ingram, J.M. (1994). Gender and self-concept: a reexamination of stereotypic differences and the role of gender attitudes. Sex Roles, 30, 615-631.

Jennings, J., Geis, F., & Brown, V. (1980). Influence of television commercials on women's self-confidence and independent judgment. Journal of Personality and Social Psychology, 38, 203-210.

Josephs, R.A., Markus, H.R., & Tafarodi, R.W. (1992). Gender and self-esteem. Journal of Personality and Social Psychology, 63(3), 391-402.

Kalodner, C. (1997). Media influences on male and female non-eating disordered college students: A significant issue. Eating Disorders, 5, 47-57.

Kimball, M. (1986). Television and sex-role attitudes. In T.M. Williams (Ed.), The impact of television: A natural experiment involving three towns (pp.303-360). New York, NY: Academic.

Klemchuk, H.P., Hutchinson, C.B., and Frank, R.I. (1990). Body dissatisfaction and eating-related problems on the college campus: Usefulness of the eating disorder inventory with a nonclinical population. Journal of Counseling Psychology, 37, 297-305.

Lanis, K., & Covell, K. (1995). Images of women in advertisements: Effects on attitudes related to sexual aggression. Sex Roles, 32, 639-649.

Lautman, M. (1991). End benefit segmentation and prototypical bonding. Journal of Advertising Research, 31(3), 9-18.



Leary, M.R., Tambor, E.S., Terdal, S.K., & Downs, D.L. (1995). Self esteem as an interpersonal monitor: The sociometer hypothesis. Journal of Personality and Social Psychology, 68(3), 518-530.

Lutz, K.A., & Lutz, R.J. (1977). Effects of interactive imagery on learning: Application to advertising. Journal of Applied Psychology, 62(4), 493-498.

Marchand, R. (1985). Advertising the American dream. Berkeley: University of California Press.

Markus, H. (1977). Self-schema and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.

Markus, H., & Oyserman, D. (1988). Gender and thought: The role of the self-concept. In M. Crawford & M. Hamilton (Eds. ), Gender and thought (pp.100-127). New York: Springer-Verlag.

Martin, K. (1996). Puberty, sexuality, and the self: Boys and girls at adolescence. New York: Routledge.

McHugh, M.C., & Frieze, I.H. (1997). The measurement of gender-role attitudes: A review and commentary. Psychology of Women Quarterly, 21, 1-16.

Mintz, L.B., & Betz, N.E. (1986). Sex differences in the nature, realism, and correlates of body image. Sex Roles, 15, 185-195.

Murray, S.H., Touy, S.W., & Beumont, P.J. (1995). The influence of personal relationships on women's eating behavior and body satisfaction. Eating Disorders, 3(3), 243-252.

Myers, P.N., & Biocca, F.A. (1992). The elastic body image: The effect of television advertising and programming on body image distortions in young women. Journal of Communication, 42(3), 108-133.

Pavlov, I. (1927). Conditioned reflexes: An investigation of the physiological activity of the cerebral cortex. London: Oxford University Press.

Percy, L. , & Rossiter, J.R. (1992). A model of brand awareness and brand attitude advertising strategies. Psychology and Marketing, 9(4), 263-274.

Perfect, T.J. and Askew, C. (1994). Print Adverts: Not remembered but memorable. Applied Cognitive Psychology, 8, 693-703.

Petty, R.E., and Cacioppo, J.T. (1983). Central and peripheral routes to persuasion: application to advertising. In L. Percy. & A.G. Woodside (Eds), Advertising and Consumer Psychology (pp. 3-23). Lexington, Massachusetts: Lexington Books.

Petty, R.E., and Cacioppo, J.T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (123-205). New York: Academic Press.

Pinhas, L., Toner, B., Ali, A., Garfinkel, P., & Stuckless, N. (1999). The effects of the ideal of female beauty on mood and body satisfaction. International Journal of Eating Disorders, 25, 223-226.

Preston, I.L. (1968). Relationships between emotional, intellectual, and rational appeals in advertising. Speech Monographs, 35, 504-511.

Richins, M.L. (1991). Social comparison and the idealized images of advertising. Journal of Consumer Research, 18, 71-83.

Rogers, T.B. (1981). A model of the self as an aspect of the human information processing system. In N. Cantor & J.F. Kihlstrom (Eds.). Personality, cognition, and social interaction (pp.193-214). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Schmitt, B.H., Tavassoli, N.T., & Millard, R.T. (1993). Memory for print ads: Understanding relations among brand name, copy, and picture. Journal of Consumer Psychology, 2, 55-81.

Scholten, M. (1996). Lost and found: the information-processing model of advertising effectiveness. Journal of Business Research, 37, 97-104

Silverstein, B., Perdue, L., Peterson, B., & Kelly, E. (1986). The role of the mass media in promoting a thin standard of bodily attractiveness for women. Sex Roles, 14, 519-532.

Snyder, M. (1987). Public appearances/private realities: The psychology of self-monitoring. New York, NY: Freeman.

Spence, J.T., & Hahn, E.D. (1997). The attitudes toward women scale and attitude change in college students. Psychology of Women Quarterly, 21, 17-34.

Stice, E., Schupak-Neuberg, E., Shaw, H., & Stein, R. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. Journal of Abnormal Psychology, 103, 836-840.

Tantleff-Dunn, S., & Thompson, J.K. (1995). Romantic partners and body image disturbance: further evidence for the role of perceived-actual disparities. Sex Roles, 33, 589-606.

Thompson, J.K. (1986, April). Many women see themselves as roundfaced and pudgy, even when no one else does. Psychology Today, 39-44.

Thompson, J.K., & Heinberg, L.J. (1993). Preliminary test of two hypotheses of body image disturbance. International Journal of Eating Disorders, 14, 59-63.

Tiggemann, M. & Pickering, A.(1996). Role of television in adolescent women's body dissatisfaction and drive for thinness. International Journal of Eating Disorders, 20(2), 199-203.

Ultra-thin magazine models found to have little negative effect on adolescent girls. (1999, October). The Monitor, p. 10.

Ungar, R.K. (1979). Female and male. New York: Harper and Row.

Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063-1070.

Wills, T.A. (1981). Downward comparison principles in social psychology. Psychological Bulletin, 90, 245-271.

Wolf, N. (1991). The beauty myth: How images of beauty are used against women. New York: Anchor Books.

Wood, J.V. (1996). What is social comparison and how should we study it? Personality and Social Psychology Bulletin, 22 (5), 520-537.

Wood, J.V. (1989). Theory and research concerning social comparisons of personal attributes. Psychological Bulletin, 106, 231-248.

Zimmerman, J., Kauffman, M., & Leifer, N. (1988). Cigarette advertisements in magazines: Evidence for a differential focus on women and youth magazines. Health Education Quarterly, 15(2), 225-233.

## Appendix A

## AWS

1. Swearing and obscenity are more repulsive in the speech of a woman than a man.

0	1	2	3	4
agree strongly				disagree strongly

2. Under modern economic conditions, with women active outside the home, men should share in household tasks such as washing dishes and doing laundry.

0	1	2	3	4
agree strongly				disagree strongly

3. It is insulting to women to have the obey clause still in the marriage service.

0	1	2	3	4
agree strongly				disagree strongly

4. A woman should be as free as a man to propose marriage.

0	1	2	3	4
agree strongly				disagree strongly

5. Women should worry less about their rights and more about becoming good wives and mothers.

0	1	2	3	4
agree strongly				disagree strongly

6. Women earning as much as their dates should bear equally the expense when they go out together.

0	1	2	3	4
agree strongly				disagree strongly

7. Women should assume their rightful place in business and all the professions along with men.

0	1	2	3	4
agree strongly				disagree strongly

8. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

0	1	2	3	4
agree strongly				disagree strongly

9. Sons in a family should be given more encouragement to go to college than daughters.

0	1	2	3	4
agree strongly				disagree strongly

10. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

0	1	2	3	4
agree strongly				disagree strongly

11. In general, the father should have greater authority than the mother in the bringing up of children.

0	1	2	3	4
agree strongly				disagree strongly

12. The intellectual leadership of a community should be largely in the hands of men.

0	1	2	3	4
agree strongly				disagree strongly

13. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity.

0	1	2	3	4
agree strongly				disagree strongly

14. There are many jobs in which men should be given preference over women in being hired or promoted.

0	1	2	3	4
agree strongly				disagree strongly

15. Women should be given equal opportunity with men for apprenticeship in the various trades.

0	1	2	3	4
agree strongly				disagree strongly

## Appendix B

## PANAS

This scale consists of a number of words that describe different feeling and emotions. Read each item and then mark the appropriate answer in the space next to the word. Indicate to what extent you feel this way RIGHT NOW, that is, at the present moment. Use the following scale to record your answers.

- 1 Very slightly or not at all
- 2 A little
- 3 Moderately
- 4 Quite a bit
- 5 Extremely

\_\_\_\_\_ interested  
\_\_\_\_\_ distressed  
\_\_\_\_\_ excited  
\_\_\_\_\_ upset  
\_\_\_\_\_ strong  
\_\_\_\_\_ guilty  
\_\_\_\_\_ scared  
\_\_\_\_\_ hostile  
\_\_\_\_\_ enthusiastic  
\_\_\_\_\_ proud

\_\_\_\_\_ irritable  
\_\_\_\_\_ alert  
\_\_\_\_\_ ashamed  
\_\_\_\_\_ inspired  
\_\_\_\_\_ nervous  
\_\_\_\_\_ determined  
\_\_\_\_\_ attentive  
\_\_\_\_\_ jittery  
\_\_\_\_\_ active  
\_\_\_\_\_ afraid



## Appendix C

**"EATING HABITS INVENTORY"**

This is a scale which measures a variety of attitudes, feelings, and behaviors. Some of the items related to food and eating. Others ask you about your feelings about yourself. THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST. Read each question and place an "X" in the column which best applies to you. Please answer each question very carefully. Thank you.

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |  |
|-------|-------|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | _____ | _____ | 1. I eat sweets and carbohydrates without feeling nervous.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 2. I think my stomach is too big.                            |
| _____ | _____ | _____ | _____ | _____ | _____ | 3. I wish I could return to the security of childhood.       |
| _____ | _____ | _____ | _____ | _____ | _____ | 4. I eat when I am upset.                                    |
| _____ | _____ | _____ | _____ | _____ | _____ | 5. I stuff myself with food.                                 |
| _____ | _____ | _____ | _____ | _____ | _____ | 6. I wish I could be younger.                                |
| _____ | _____ | _____ | _____ | _____ | _____ | 7. I think about dieting.                                    |
| _____ | _____ | _____ | _____ | _____ | _____ | 8. I get frightened when I think my feelings are too strong. |
| _____ | _____ | _____ | _____ | _____ | _____ | 9. I think my thighs are too large.                          |
| _____ | _____ | _____ | _____ | _____ | _____ | 10. I feel ineffective as a person.                          |

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |  |
|-------|-------|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | _____ | _____ | 11. I feel extremely guilty after overeating.                |
| _____ | _____ | _____ | _____ | _____ | _____ | 12. I think my stomach is just the right size.               |
| _____ | _____ | _____ | _____ | _____ | _____ | 13. Only outstanding performance is good enough in my family |
| _____ | _____ | _____ | _____ | _____ | _____ | 14. The happiest time in life is when you are a child.       |
| _____ | _____ | _____ | _____ | _____ | _____ | 15. I am open about my feelings.                             |
| _____ | _____ | _____ | _____ | _____ | _____ | 16. I am terrified about gaining weight.                     |
| _____ | _____ | _____ | _____ | _____ | _____ | 17. I trust others.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 18. I feel alone in the world.                               |
| _____ | _____ | _____ | _____ | _____ | _____ | 19. I feel satisfied with the overall shape of my body.      |
| _____ | _____ | _____ | _____ | _____ | _____ | 20. I am generally in control of things in my life.          |

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |   |
|-------|-------|-------|-------|-------|-------|---|
| _____ | _____ | _____ | _____ | _____ | _____ | 21. I get confused about what emotion I'm feeling.                                |
| _____ | _____ | _____ | _____ | _____ | _____ | 22. I would rather be an adult than a child.                                      |
| _____ | _____ | _____ | _____ | _____ | _____ | 23. I can communicate with others easily.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 24. I wish I were someone else.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 25. I exaggerate or magnify the importance of my weight.                          |
| _____ | _____ | _____ | _____ | _____ | _____ | 26. I can clearly identify what emotion I am feeling.                             |
| _____ | _____ | _____ | _____ | _____ | _____ | 27. I feel inadequate.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 28. I have gone on eating binges where I have felt that I could not stop.         |
| _____ | _____ | _____ | _____ | _____ | _____ | 29. As a child, I tried very hard to avoid disappointing my parents and teachers. |
| _____ | _____ | _____ | _____ | _____ | _____ | 30. I have close relationships.   |

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |  |
|-------|-------|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | _____ | _____ | 31. I like the shape of my buttocks.                 |
| _____ | _____ | _____ | _____ | _____ | _____ | 32. I am preoccupied with the desire to be thinner.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 33. I don't know what's going on with me.            |
| _____ | _____ | _____ | _____ | _____ | _____ | 34. I have trouble expressing emotions to others.    |
| _____ | _____ | _____ | _____ | _____ | _____ | 35. The demands of adulthood are too great.          |
| _____ | _____ | _____ | _____ | _____ | _____ | 36. I hate being less than best at things            |
| _____ | _____ | _____ | _____ | _____ | _____ | 37. I feel secure about myself.                      |
| _____ | _____ | _____ | _____ | _____ | _____ | 38. I think about bingeing (overeating).             |
| _____ | _____ | _____ | _____ | _____ | _____ | 39. I feel happy that I am not a child anymore.      |
| _____ | _____ | _____ | _____ | _____ | _____ | 40. I get confused as to whether or not I am hungry. |

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |  |
|-------|-------|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | _____ | _____ | 41. I have a low opinion of myself.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 42. I feel that I can achieve my standards.                                  |
| _____ | _____ | _____ | _____ | _____ | _____ | 43. My parents have expected excellence of me.                               |
| _____ | _____ | _____ | _____ | _____ | _____ | 44. I worry that my feelings will get out of control.                        |
| _____ | _____ | _____ | _____ | _____ | _____ | 45. I think that my hips are too big.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 46. I eat moderately in front of others and stuff myself after they're gone. |
| _____ | _____ | _____ | _____ | _____ | _____ | 47. I feel bloated after eating a normal meal.                               |
| _____ | _____ | _____ | _____ | _____ | _____ | 48. I feel that people are happiest when they are children.                  |
| _____ | _____ | _____ | _____ | _____ | _____ | 49. If I gain a pound, I worry that I will keep gaining.                     |
| _____ | _____ | _____ | _____ | _____ | _____ | 50. I feel that I am a worthwhile person.                                    |

ALWAYS USUALLY OFTEN SOMETIMES RARELY NEVER

- |       |       |       |       |       |       |   |
|-------|-------|-------|-------|-------|-------|---|
| _____ | _____ | _____ | _____ | _____ | _____ | 51. When I am upset, I don't know if I'm sad, frightened , or angry.                                    |
| _____ | _____ | _____ | _____ | _____ | _____ | 52. I feel that I must do things perfectly , or not do them at all.                                     |
| _____ | _____ | _____ | _____ | _____ | _____ | 53. I have thought of trying to vomit in order to lose weight.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 54. I need to keep people at a certain distance (feel uncomfortable if someone tries to get too close). |
| _____ | _____ | _____ | _____ | _____ | _____ | 55. I think that my thighs are just the right size.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 56. I feel empty inside.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 57. I can talk about personal thoughts or feelings.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 58. The best years of your life are when you become an adult.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 59. I think that my buttocks are too large.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 60. I have feelings I can't quite identify.   |
| _____ | _____ | _____ | _____ | _____ | _____ | 61. I eat or drink in secrecy.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 62. I have extremely high goals.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 63. I think my hips are just the right size.  |
| _____ | _____ | _____ | _____ | _____ | _____ | 64. When I am upset, I worry that I will start eating.  |

## **Appendix D**

### **Magazine Development Questionnaire**

**1. What are your general impressions of this magazine?**

**2. Which magazines do you typically buy/subscribe to?**

**What about these magazines do you like?**

## Appendix E

### Institutional Review Board (IRB) Proposal

#### The Influence of Print Media Advertisements on Women

Experimenter: Heather Paluso

1. Media advertisements frequently present idealized images of women in order to sell products. These media images are prevalent in our society and present unrealistic images of the ideal female body. Since social comparison is the prevalent method by which we learn about ourselves and the world, examining the effects of social comparison as manipulated by advertisers is important. Placed against a backdrop of society's reverence for beauty that is a largely unattainable standard, advertisers utilize the natural tendency towards social comparison as a way to promote their products. This study will examine how print advertisements in women's magazines affect women in relation to mood and body dissatisfaction. Gender role affiliation also will be assessed to explore the role it plays in viewing advertisements.

The proliferation of idealized images in media have been linked to body dissatisfaction, low self-concept, and the prevalence of eating disorders in our culture. Learning more about how these media images affect women will help facilitate understanding of how to counter these negative effects. Media are extremely prevalent in society and in many cases busy parents allow it to "raise" their children by allowing them free and unsupervised access to movies, television, magazines, the Internet, computer games, etc. Children viewing

unrealistic images of women may be most susceptible to profound negative effects because they are looking toward media to learn how the world operates. It is therefore important to understand more about the effect media has on society.

2. Subjects will be recruited from the Psychology 100 pool. Students enrolled in Psychology 100 classes receive course credit for participation in research. The subjects will be female, as the purpose of the research is to examine the effect of idealized images of women.

3. Subjects will be recruited using sign-up sheets posted in an area designated for this use. Subjects will be Psychology 100 students and will receive course credit for their participation.

4. The study will take place in PhP 242. Each subject will be placed separately in one of the several individual rooms contained in PhP 242.

5. There will be three groups in this study—two experimental groups and a control group. The first experimental group will be shown an unaltered appearance-related advertisement with no modifications. An appearance-related advertisement is one in which the woman is presented in such a way that her appearance is the principal feature of the advertisement (e.g. posed provocatively and clothed to accentuate physical features). The second

experimental group will be shown a computer manipulated version of the appearance-related advertisement containing only the female model, with the product and text removed. The control group will be shown a computer manipulated version of the advertisement showing only the advertised product and text. In all three conditions, the size of the advertisements will be 8 1/2"x 11".

The procedure for all three groups will be the same except the version of the advertisements shown to subjects will vary. This study will be conducted with groups of approximately 6 subjects per session. The sessions will be held in a classroom with adjacent smaller private rooms. In order to avoid group effects, each subject will be placed in a room by herself to complete the experimental material. The experimenter will explain the informed consent to the subject and after completion of the consent, will present her with an envelope and the measurements of mood, body image, and gender role. She will be asked to place the measures in the envelope when they are finished. At the completion of the measures, the subject will be given a binder containing the target advertisements as well as several non-appearance related articles selected from Compton's Encyclopedia on CD-ROM. The articles will describe travel and culture in various cities in North America. Subjects will be told they are viewing a prototype for a new type of magazine and the experimenter is interested in their general impressions of the material. This is intended to facilitate a naturalistic viewing of the material. The subjects will be able to view the advertisements as they would in real life, with the advertisements appearing amidst articles. No further instructions will be given as to how to view the material.

At the conclusion of the viewing, subjects will be asked to complete a second mood measure as well as answer several questions regarding their general impressions of the material. They will be asked what they liked about the magazine, what they did not like about it, and if they would buy it on a magazine rack. Directions specific to the administration of this instrument will be given.

Subjects will be told at this time that they are participating in a study of attitudes and self-perceptions of college women. At the conclusion of the measures and before subjects are dismissed, they will be debriefed and thanked for their participation.

6. The increased knowledge of advertising effects gained by this research provides many benefits to the field of psychology. Advertising is prevalent in our society, especially advertising that utilizes unrealistic images of women to sell products. The women portrayed in these advertisements typically possess a standard of physical appearance that is unattainable to the average woman. Advertisers use these models to present to consumers the "ideal" that a particular product can help the consumer attain. Understanding how viewing these images affects women's mood and body dissatisfaction is an important step in determining the impact of media on our society.

7. Risk or discomfort to the subjects is expected to be minimal. Research of this nature, in which subjects view advertisements and fill out questionnaires, is fairly

common in the Psychology and Advertising literature and no negative effects have been reported.

8. At the conclusion of the research, subjects will be informed of the purpose of the study and the expected results. The experimenter will address any questions or concerns that arise.

9. The subjects' names or any other identifying information will not be associated with the questionnaires and other research material. Subjects' names will be recorded on a separate sheet so they can receive course credit for their participation. The experimenter, Thesis chair, and undergraduate research assistants will be only people with access to the completed questionnaires.



## Appendix F

Demographic Questionnaire

AGE \_\_\_\_\_

MARITAL STATUS (choose one)

\_\_\_\_\_ Single

\_\_\_\_\_ Married

\_\_\_\_\_ Co-habiting

\_\_\_\_\_ Divorced

\_\_\_\_\_ Other

ETHNICITY \_\_\_\_\_



## Appendix H

### Research Protocol

When a subject arrives in PhP 242, they are directed into one of the smaller adjoining rooms. The experimenter or research assistant says:

*"This is a study of college student's attitudes toward media. Before we begin, please read this form, and sign if you agree to participate in this research."*

Allow time for subject to read and sign the informed consent, then verify they have written their name and psychology 100 TA or section number on the form. Tear off bottom section of informed consent, which contains the experimenter's name and phone number, in case the subject wishes to contact the experimenter with any further questions. Then, proceed with the following statement:

*"There are three steps in this experiment. First, complete the questionnaire in envelope #1. When you are finished, place it in the envelope and select this binder. Take as much time as you like to view the material in the binder. When you are finished, select envelope #2 and complete the questionnaires. Finally, when you are through with envelope #2, open the door to indicate to the experimenter that you have finished this part of the experiment. Do you have any questions?"*

Answer any questions the subject may have, then leave the room, shutting the door behind you. Continue this procedure with all subjects as they arrive. When you notice an open door indicating the subject is through, proceed to that room and debrief the subject using the following procedure:

*"This is a study of college women's attitudes toward media, specifically advertisements. We are interested in learning how advertisements featuring women affect the mood of consumers. We believe that viewing idealistic images of women can lower mood as a result of the social comparison process, in which we compare ourselves to others in order to formulate our self-concepts. In this experiment, participants viewed advertisements in the context of magazine articles to facilitate naturalistic viewing of the advertisements. Do you have any questions regarding this experiment?"*